

Serial Number:

09/165,546A

CRF Processing Date:

5/4/2001

Edited by:

Verified by:

(STIC staff)

ENTERED

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically:
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically:
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included:
- ☐ Deleted extra, invalid, headings used by an applicant, specifically:
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of titles; ☐ secretary initials/lastname at end of title; ☐ page numbers throughout text; ☐ other invalid text, such as _____.
- ☐ Inserted mandatory headings, specifically: _____
- ☒ Corrected an obvious error in the response, specifically:
Seq 3 - corrected (B) TYPE: response; corrected PRIOR APP DATA: response
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically:
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☒ Other: corrected spelling of inventor names

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

RAW SEQUENCE LISTING DATE: 05/04/2001
PATENT APPLICATION: US/09/165,546A TIME: 17:31:26

Input Set : A:\Pto.amc
Output Set: N:\CRF3\05042001\I165546A.raw

SEQUENCE LISTING

3 (1) GENERAL INFORMATION:
4 (i) APPLICANT: Knuth, Alexander; Jager, Elke; Chen, Yao,
5 Canlan, Matt; Gure, Ali, Old, Lloyd, Ritter, Gerd
7 (ii) TITLE OF INVENTION: ISOLATEO PEPTIDES CORRESPONDING TO
8 AMINO ACIO SEQUENCES OF NY-ESO-1, WHICH BIND TO
9 MHC CLASS I AND MHC CLASS II MOLECULES, AND
10 USES THEREOF
12 (iii) NUMBER OF SEQUENCES: 14
14 (iv) CORRESPONDENCE ADDRESS:
15 (A) ADDRESSEE: FULBRIGHT & JAWORSKI LLP
16 (B) STREET: 666 Fifth Avenue
17 (C) CITY: New York City
18 (O) STATE: New York
19 (E) COUNTRY: USA
20 (F) ZIP: 10158
22 (v) COMPUTER READABLE FORM:
23 (A) MEOIUM TYPE: Diskette, 3.5 inch, 144 kb storage
24 (B) COMPUTER: IBM
25 (C) OPERATING SYSTEM: PC-DOS
26 (D) SOFTWARE: WordPerfect
28 (vi) CURRENT APPLICATION DATA:
C--> 29 (A) APPLICATION NUMBER: US/09/165,546A
C--> 30 (B) FILING DATE: 02-Oct-1998
31 (C) CLASSIFICATION: 530
41 (vii) PRIOR APPLICATION DATA:
34 (A) APPLICATION NUMBER: 09/062,422
35 (B) FILING DATE: April 17, 1998
38 (A) APPLICATION NUMBER: 08/937,263
39 (B) FILING OATE: September 15, 1997
42 (A) APPLICATION NUMBER: US 08/752,182
43 (B) FILING DATE: 03-October-1996
45 (viii) ATTORNEY/AGENT INFORMATION:
46 (A) NAME: Hanson, Norman D.
47 (B) REGISTRATION NUMBER: 30,946
48 (C) REFERENCE/DOCKET NUMBER: LUD 5466.3
50 (ix) TELECOMMUNICATION INFORMATION:
51 (A) TELEPHONE: (212) 688-9200
52 (B) TELEFAX: (212) 838-3884
54 (2) INFORMATION FOR SEQ ID NO: 1:
55 (i) SEQUENCE CHARACTERISTICS:
56 (A) LENGTH: 752 base pairs
57 (B) TYPE: nucleic acid
58 (C) STRANDEDNESS: double
59 (O) TOPOLOGY: linear
60 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
62 ATCCTCGTGG GCCCTGACCT TCTCTCTGAG AGCCGGGCAG AGGCTCCGGA GCC

53

RAW SEQUENCE LISTING

DATE: 05/04/2001

PATENT APPLICATION: US/09/165,546A

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Input Set : A:\Pto.amc

Output Set: N:\CRF3\05042001\I165546A.raw

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64 ATG CAG GCC GAA GGC CGG GGC ACA GGG GGT TCG ACG GGC GAT GCT          98
65 Met Gln Ala Glu Gly Arg Gly Thr Gly Gly Ser Thr Gly Asp Ala
66           5              10              15
68 GAT GGC CCA GGA GGC CCT GGC ATT CCT GAT GGC CCA GGG GGC AAT          143
69 Asp Gly Pro Gly Gly Pro Gly Ile Pro Asp Gly Pro Gly Gly Asn
70           20              25              30
72 GCT GGC GGC CCA GGA GAG GCG GGT GCC ACG GGC GGC AGA GGT CCC          188
W--> 73 Ala Gly Gly Pro Gly Glu Ala Gly Ala Thr Gly Gly Arg Aly Pro
74           35              40              45
76 CGG GGC GCA GGG GCA GCA AGG GCC TCG GGG CCG GGA GGA GGC GCC          233
77 Arg Gly Ala Gly Ala Ala Arg Ala Ser Gly Pro Gly Gly Gly Ala
78           50              55              60
80 CCG CGG GGT CCG CAT GGC GGC GCG GCT TCA GGG CTG AAT GGA TGC          278
81 Pro Arg Gly Pro His Gly Gly Ala Ala Ser Gly Leu Asn Gly Cys
82           65              70              75
84 TGC AGA TGC GGG GCC AGG GGG CCG GAG AGC CGC CTG CTT GAG TTC          323
85 Cys Arg Cys Gly Ala Arg Gly Pro Glu Ser Arg Leu Leu Glu Phe
86           80              85              90
88 TAC CTC GCC ATG CCT TTC GCG ACA CCC ATG GAA GCA GAG CTG GCC          368
89 Tyr Leu Ala Met Pro Phe Ala Thr Pro Met Glu Ala Glu Leu Ala
90           95              100             105
92 CGC AGG AGC CTG GCC CAG GAT GCC CCA CCG CTT CCC GTG CCA GGG          413
93 Arg Arg Ser Leu Ala Gln Asp Ala Pro Pro Leu Pro Val Pro Gly
94           110             115             120
96 GTG CTT CTG AAG GAG TTC ACT GTG TCC GGC AAC ATA CTG ACT ATC          458
97 Val Leu Leu Lys Glu Phe Thr Val Ser Gly Asn Ile Leu Thr Ile
98           125             130             135
100 CGA CTG ACT GCT GCA GAC CAC CGC CAA CTG CAG CTC TCC ATC AGC          503
101 Arg Leu Thr Ala Ala Asp His Arg Gln Leu Gln Leu Ser Ile Ser
102           140             145             150
104 TCC TGT CTC CAG CAG CTT TCC CTG TTG ATG TGG ATC ACG CAG TGC          548
105 Ser Cys Leu Gln Gln Leu Ser Leu Leu Met Trp Ile Thr Gln Cys
106           155             160             165
108 TTT CTG CCC GTG TTT TTG GCT CAG CCT CCC TCA GGG CAG AGG CGC          593
109 Phe Leu Pro Val Phe Leu Ala Gln Pro Pro Ser Gly Gln Arg Arg
110           170             175             180
112 TAA GCCCAGCCTG GCGCCCCTTC CTAGGTCATG CCTCCTCCCC TAGGGAATGG          646
113 TCCCAGCACG AGTGGCCAGT TCATTGTGGG GGCCTGATTG TTTGTCGCTG GAGGAGGACG          706
114 GCTTACATGT TTGTTTCTGT AGAAAATAAA ACTGAGCTAC GAAAAA          752
118 (2) INFORMATION FOR SEQ ID NO: 2:
119     (i) SEQUENCE CHARACTERISTICS:
120         (A) LENGTH: 31 base pairs
121         (B) TYPE: nucleic acid
122         (C) STRANDEDNESS: single
123         (D) TOPOLOGY: linear
124     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
126 CACACAGGAT CCATGGATGC TGCAGATGCG G          31
130 (2) INFORMATION FOR SEQ ID NO: 3:
131     (i) SEQUENCE CHARACTERISTICS:

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RAW SEQUENCE LISTING

DATE: 05/04/2001

PATENT APPLICATION: US/09/165,546A

TIME: 17:31:26

Input Set : A:\Pto.amc

Output Set: N:\CRF3\05042001\I165546A.raw

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201      (A) LENGTH: 18 amino acids
202      (B) TYPE: amino acid
203      (D) TOPOLOGY: linear
204      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
206 Val Leu Leu Lys Glu Phe Thr Val Ser Gly Asn Ile Leu Thr Ile Arg
207           5             10             15
209 Leu Thr
211 (2) INFORMATION FOR SEQ ID NO: 10:
212      (i) SEQUENCE CHARACTERISTICS:
213          (A) LENGTH: 18 amino acids
214          (B) TYPE: amino acid
215          (D) TOPOLOGY: linear
216      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
218 Pro Leu Pro Val Pro Gly Val Leu Leu Lys Glu Phe Thr Val Ser Gly
219           5             10             15
221 Asn Ile
223 (2) INFORMATION FOR SEQ ID NO: 11:
224      (i) SEQUENCE CHARACTERISTICS:
225          (A) LENGTH: 18 amino acids
226          (B) TYPE: amino acid
227          (D) TOPOLOGY: linear
228      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
230 Gly Ala Ala Ser Gly Leu Asn Gly Cys Cys Arg Cys Gly Ala Arg Gly
231           5             10             15
233 Pro Glu
236 (2) INFORMATION FOR SEQ ID NO: 12:
237      (i) SEQUENCE CHARACTERISTICS:
238          (A) LENGTH: 18 amino acids
239          (B) TYPE: amino acid
240          (D) TOPOLOGY: linear
241      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
243 Ser Arg Leu Leu Glu Phe Tyr Leu Ala Met Pro Phe Ala Thr Pro Met
244           5             10             15
246 Glu Ala
249 (2) INFORMATION FOR SEQ ID NO: 13:
250      (i) SEQUENCE CHARACTERISTICS:
251          (A) LENGTH: 18 amino acids
252          (B) TYPE: amino acid
253          (D) TOPOLOGY: linear
254      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
256 Thr Val Ser Gly Asn Ile Leu Thr Ile Arg Leu Thr Ala Ala Asp His
257           5             10             15
259 Arg Gln
266 (2) INFORMATION FOR SEQ ID NO: 14:
267      (i) SEQUENCE CHARACTERISTICS:
268          (A) LENGTH: 6 amino acids
269          (B) TYPE: amino acid
270          (D) TOPOLOGY: linear
271      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:

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RAW SEQUENCE LISTING DATE: 05/04/2001
PATENT APPLICATION: US/09/165,546A TIME: 17:31:26

Input Set : A:\Pto.amc
Output Set: N:\CRF3\05042001\I165546A.raw

273 Leu Leu Met Trp Ile Thr
274 5

VERIFICATION SUMMARY DATE: 05/04/2001
PATENT APPLICATION: US/09/165,546A TIME: 17:31:27

Input Set : A:\Pto.amc
Output Set: N:\CRF3\05042001\I165546A.raw

L:29 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:30 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:73 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:1
L:188 M:220 C: Keyword misspelled or invalid format, [(i) SEQUENCE CHARACTERISTICS:]

1644

RAW SEQUENCE LISTING DATE: 05/04/2001
 PATENT APPLICATION: US/09/165,546A TIME: 16:23:47

Input Set : A:\#711529v1 -LUD 5466.4 SEQUENCE LISTING.txt
 Output Set: N:\CRF3\05042001\I165546A.raw

Does Not Comply
 Corrected Diskette Needed

SEQUENCE LISTING

1 (1) GENERAL INFORMATION:
 C--> 2 (i) APPLICANT: Knuth, Alexander; Jager, Elke; Chen, Yao,
 3 Canlan, Matt; Gure, Ali, Old, Lloyd, Ritter, Gerd
 5 (ii) TITLE OF INVENTION: ISOLATED PEPTIDES CORRESPONDING TO
 6 AMINO ACID SEQUENCES OF NY-ESO-1, WHICH BIND TO
 7 MHC CLASS I AND MHC CLASS II MOLECULES, AND
 8 USES THEREOF
 10 (iii) NUMBER OF SEQUENCES: 14
 12 (iv) CORRESPONDENCE ADDRESS:
 13 (A) ADDRESSEE: FULBRIGHT & JAWORSKI LLP
 14 (B) STREET: 666 Fifth Avenue
 15 (C) CITY: New York City
 16 (D) STATE: New York
 17 (E) COUNTRY: USA
 18 (F) ZIP: 10158
 20 (v) COMPUTER READABLE FORM:
 21 (A) MEDIUM TYPE: Diskette, 3.5 inch, 144 kb storage
 22 (B) COMPUTER: IBM
 23 (C) OPERATING SYSTEM: PC-DOS
 24 (D) SOFTWARE: WordPerfect
 26 (vi) CURRENT APPLICATION DATA:
 C--> 27 (A) APPLICATION NUMBER: US/09/165,546A
 C--> 28 (B) FILING DATE: 02-Oct-1998
 29 (C) CLASSIFICATION: 530
 39 (vii) PRIOR APPLICATION DATA:
 32 (A) APPLICATION NUMBER: 08/937,263 09/062,422
 33 (B) FILING DATE: April 17, 1998
 36 (A) APPLICATION NUMBER: 08/937,263
 37 (B) FILING DATE: September 15, 1997
 40 (A) APPLICATION NUMBER: US 08/752,182
 41 (B) FILING DATE: 03-October-1996
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 44 (A) NAME: Hanson, Norman D.
 45 (B) REGISTRATION NUMBER: 30,946
 46 (C) REFERENCE/DOCKET NUMBER: LUD 5466.3
 48 (ix) TELECOMMUNICATION INFORMATION:
 49 (A) TELEPHONE: (212) 688-9200
 50 (B) TELEFAX: (212) 838-3884

ERRORED SEQUENCES

128 (2) INFORMATION FOR SEQ ID NO: 3:
 129 (i) SEQUENCE CHARACTERISTICS:
 130 (A) LENGTH: 32 base pairs
 E--> 131 (B) TYPE: nuclear acid

nucleic

RAW SEQUENCE LISTING DATE: 05/04/2001
PATENT APPLICATION: US/09/165,546A TIME: 16:23:47

Input Set : A:\#711529v1 -LUD 5466.4 SEQUENCE LISTING.txt
Output Set: N:\CRF3\05042001\I165546A.raw

132 (C) STRANDEDNESS: single
133 (D) TOPOLOGY: linear
134 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
136 CACACAAAGC TTGGCTTAGC GCCTCTGCCC TG 32

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/165,546A

DATE: 05/04/2001
TIME: 16:23:48

Input Set : A:\#711529v1 -LUD 5466.4 SEQUENCE LISTING.txt
Output Set: N:\CRF3\05042001\I165546A.raw

L:2 M:220 C: Keyword misspelled or invalid format, [(i) APPLICANT:]
L:27 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:28 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:64 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:68 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:71 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:1
L:72 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:76 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:80 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:84 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:88 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:92 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:96 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:100 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:104 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:108 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:130 M:241 E: Invalid Alpha Header Field, [TYPE:], SeqNo=3
L:186 M:220 C: Keyword misspelled or invalid format, [(i) SEQUENCE CHARACTERISTICS:]